CRSRA

Commercial Remote Sensing Regulatory Affairs

CRSRA's Implementation of the New Rule

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Overview

This presentation provides an overview of CRSRA's preliminary implementation of the new Final Rule on the Licensing of Private Remote Sensing Space Systems, 15 CFR 960.

This presentation does not represent final tiering decisions for current NOAA licensees

Agenda:

- Current State of Licensing
- Licensing Under the New Rule
- Current Compliance Activities
- Compliance Under the New Rule
- Tiering Methodology… Defining Available
- Tiering Methodology…Current Availability
- Tiering Methodology… Emergent Capability
- Conclusion

Current State of Licensing

CRSRA currently has 86 licenses

Of these licenses 31 companies are operational

The operational systems use 152 ground stations

Licensing Under the New Rule

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"Blank Slate" tiering focuses upon the data that can be produced by a system's best capability

For multi-sensor systems, tier selection is determined by the most capable sensor

Conditions are likely to apply to the highest-capability sensor

Current Compliance Activities

Quarterly audits

Annual audits

Data Protection Plan (DPP)

Site inspections

Compliance Under the New Rule

Annual certification

Site inspections

Data availability analysis

Tiering Methodology… Defining *Available*

Requires evidence that data can be obtained or purchased

Best commercially-available capability from foreign sources

Licensed capability for U.S. sources

Takes into account known government restrictions on the sale of certain data (e.g., France, Germany, Canada, etc.)

Tiering Methodology…Current Availability

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Converting licenses

- CRSRA's tiering determinations for existing licenses will be made on current licensed capabilities

- New license applications will be tiered based on Appendix A (application)

Tiering Methodology… Foreign Capabilities

Phenomenology	Foreign Benchmark	Country
Persistence (Best Revisit)	SAR = 12hr (3hr 2021)	Finland
	PAN/MSI = 6hr (3hr 2021)	Argentina
PAN	.5m	China
X-Band SAR	1m	Finland & Germany
C-Band SAR	-	-
S-Band SAR	-	-
L-Band SAR	-	-
P-Band SAR	-	-
MSI VNIR	.6m	United Kingdom
MSI SWIR	20m	Europe
MSI MWIR	5.5m	Korea
MSI LWIR	80m	Brazil
TIR	-	-
Video (VNIR)	.92 (25FPS)	China

Phenomenology	Foreign Benchmark	Country
HSI VNIR Spatial	10m	Argentina & China
HSI VNIR Bands	158 375-1000nm	China
	600 400-900nm	Argentina
HSI VNIR Spectral	2.5m	Argentina
HSI SWIR Spatial	141m	India
HSI SWIR Bands	256 900-2500mn	India
HSI SWIR Spectral	10nm	India
HSI MWIR Spatial	12m	India
HSI MWIR Bands	200 3000-5000mn	India
HSI MWIR Spectral	12m	India
HSI LWIR Spatial	(1500 late 2020)	India
HSI LWIR Bands	(7100-13500 late 2020)	India
HSI LWIR Spectral	-	-

Tiering Methodology… Emergent Capability

If 2 entities submit license applications for systems with substantially the same yet novel capabilities at the same time, both systems will receive Tier 3 licenses

As soon as one of those systems exceeds its conditions (1 to 3 years), *both* systems are made Tier 2

Sources of Data

NGA Vendor Constellation Database

2019 Joint Agency Commercial Imagery Evaluation (JACIE) – Land Remote Sensing Satellite Compendium. (USGS circular 1455)

Aerospace satellite tables on U.S. and international remote sensing satellites

Current NOAA Licensees

Foreign satellite companies

Foreign governments

Press reporting & vendor websites

Conclusion

CRSRA has conducted data availability analysis for each phenomenology currently licensed

We have been contacting current licensees to discuss tiering as necessary

We expect to deliver all new licenses by July 20, 2020